



Introduction

Along the continental shelf of the southeastern United States, areas of live bottom (sponge, soft coral, and algal growth) in depths from 60-150 ft provide habitat for the black sea bass ("blackfish") populations that support important commercial and recreational fisheries. Juvenile black sea bass are found in coastal estuaries on oyster reefs, and around jetties and piers, but most fishing takes place on offshore natural and man-made reefs. From the "blackfish banks on the inner shelf (60 ft), to the mid-shelf snapper banks (120 ft), and occasionally on the outer shelf (to 150 ft), black sea bass are one of the main targets of recreational anglers who fish on the bottom near artificial and natural reefs, and the species supports commercial hook-and-line and trap (sea bass pot) fisheries on natural reefs. Managed by federal fishery management agencies as part of the "Snapper-Grouper Complex", black sea bass are subject to intense fishing pressure and were declared overfished and undergoing overfishing in 2005 by these federal agencies.

Commercial Fishery Harvest

Black sea bass have historically supported a regional offshore fishery with landings in South Carolina showing a cyclical pattern of 10-year periods of high catches (Figure 1), followed by declines. There appears however to be a steady decline in landings since the last peak in the early 1980s. The value per pound has increased substantially since 1980, with fishermen being paid over \$1.50 per pound in 2002-2003 with a slight decline in 2004. Although the landings have been cyclical, the steady decline in commercial landings since the last peak in 1990 indicates overfishing.

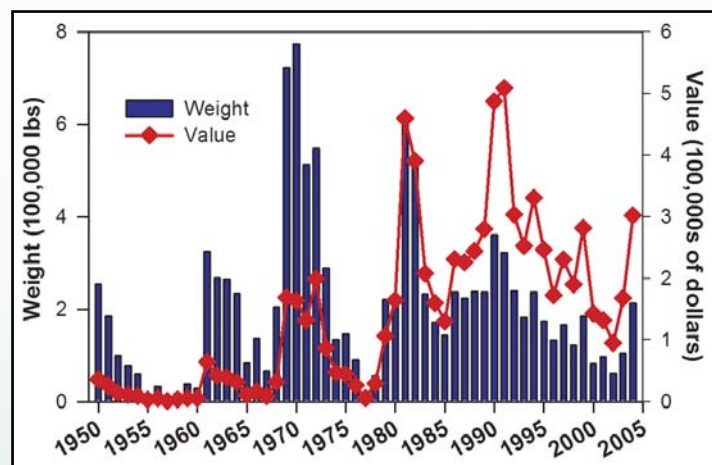


Figure 1. South Carolina commercial black sea bass landings in pounds and dollars.

Recreational Fishery Harvest

Black sea bass are a favorite target of head boats (party boats that charge by the head for a full or half day fishing) and other recreational fishing boats on natural and artificial reefs. Recreational catches of black sea bass also have been cyclical, and the downward trend in catches since 1991 parallels that in the commercial sector (Figure 2), with a resurgence in 2004 that did not hold in 2005.

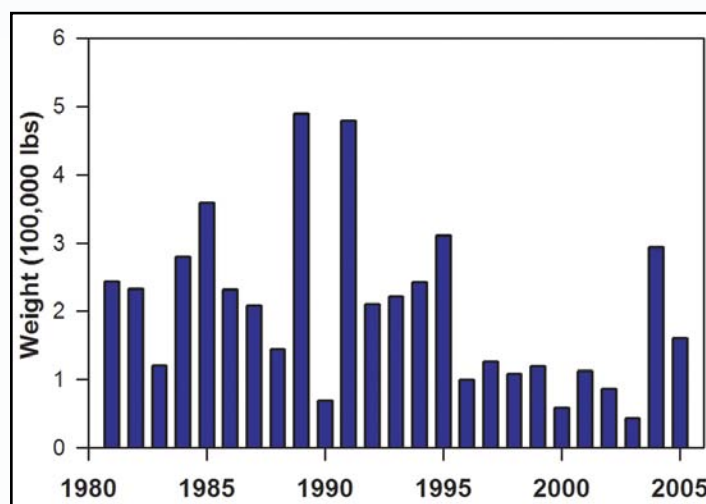


Figure 2. South Carolina recreational black sea bass landings in pounds.

Fishery Independent Sampling

Numbers of black sea bass in MARMAP (Marine Resources Monitoring, Assessment and Prediction) fish trap catches also seem to show a 10-year abundance cycle, with peaks in 1990 and around 2000, although too few decades have been sampled to confirm this. Catches in 2005 were near the 18-year average, and catches have increased since a low in 2003, when unusually cool seawater temperatures throughout the region were believed to have resulted in low catches of many species of reef fish. Catches in 2005 were still below the maximum reported in 1999, and abundance throughout the sampling period is believed to be much lower than in the 1960s and 1970s.

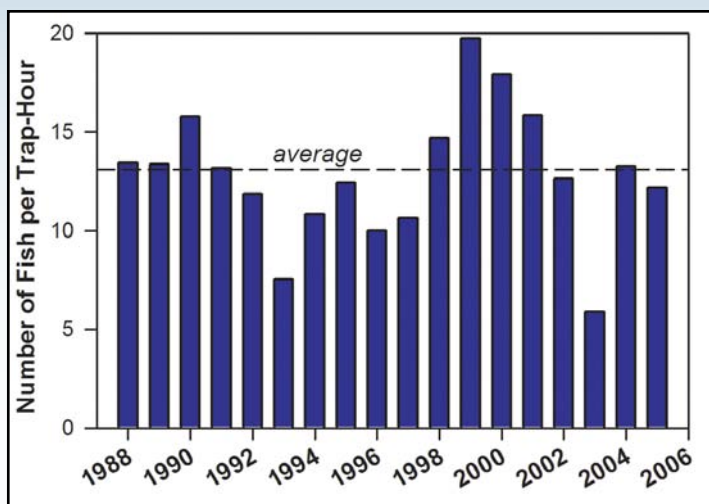
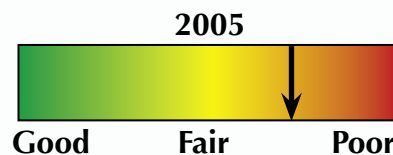


Figure 3. Number of black sea bass caught per trap hour in MARMAP fish trap surveys.

Overall Condition of the Stock and Status of Management

Although fishery-independent catches for 2004-05 were near the 18-year average, black sea bass is classified by federal fishery managers as overfished and undergoing overfishing. The most recent stock assessment found that the biomass of black sea bass has been stable since around 1990, although the biomass is only about 25% of what it would be if the population were unfished. The population has therefore been overfished since at least 1990. Long-term commercial landings data indicate that more recent catches are well below the catches recorded in the early 1970s.

The South Atlantic Fishery Management Council has implemented additional restrictions on the commercial fishery for black sea bass for the region from North Carolina to Florida. The regulations set the following allocation of total catch; 477,000 lbs gutted weight, to be decreased to 423,000 lbs in year 2 and 309,000 lbs in subsequent years until the stock recovers. Commercial regulations require use of 2-inch mesh for the entire panel of black sea bass pots and change the fishing year to June 1 through May 31. Additional regulations on the recreational fishery include a 15 fish per trip limit (reduced from 20), increasing the minimum size to 11 inches in the first year (up from 10 inches), to be raised to 12 inches in the second year, and the following allocation of total catch: 633,000 lbs (year 1), 560,000 lbs (year 2) and 409,000 lbs (year 3 and subsequent years, until the stock recovers). These regulations are expected to produce a 25-27% reduction in commercial harvest and a 46% reduction in recreational landings. It is believed that a 62% reduction in overall catch is needed to allow the stock to recover.



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